

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060221\
 Data File : VL037122.D
 Acq On : 3 Jun 2021 4:52
 Operator : SY/AP
 Sample : M2548-18
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SGS-19A

Manual Integrations
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 6/7/2021 3:01:34 PM

Quant Time: Jun 06 20:46:37 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18
 QLast Update : Tue May 18 12:00:15 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1341957	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3941332	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	3541758	10.00	ppbv	0.01

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	2610463	9.81	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	74992	0.329	ppbv	97
4) Chloromethane	3.13	50	39917m	0.477	ppbv	
9) Propene	3.01	41	95097	1.080	ppbv #	76
10) Heptane	8.12	43	26204m	0.119	ppbv	
11) Trichlorofluoromethane	3.94	101	58407	0.277	ppbv	97
13) Ethanol	3.60	45	1475034	125.578	ppbv	96
15) Acetone	3.84	43	2423050	17.628	ppbv	95
17) tert-Butyl alcohol	4.30	59	94864	0.753	ppbv	98
19) Isopropyl Alcohol	3.97	45	324723	4.395	ppbv #	1
20) Methylene Chloride	4.34	84	1604440	21.776	ppbv	97
26) Hexane	5.68	57	825284	4.891	ppbv #	46
29) Chloroform	5.74	83	36001m	0.151	ppbv	
30) Cyclohexane	7.13	84	21030	0.147	ppbv #	23
32) 1,1,1-Trichloroethane	6.50	97	27399m	0.107	ppbv	
34) 2-Butanone	5.24	43	213701	1.489	ppbv	94
35) Carbon Tetrachloride	7.01	117	13271m	0.051	ppbv	
36) Benzene	6.88	78	88508	0.261	ppbv	95
38) Trichloroethene	7.82	130	7289m	0.050	ppbv	
44) 2,2,4-Trimethylpentane	7.86	57	75712m	0.130	ppbv	
50) 4-Methyl-2-Pentanone	8.75	43	79663m	0.336	ppbv	
52) Tetrachloroethene	11.20	164	4297m	0.032	ppbv	
53) Toluene	9.80	91	771284	1.909	ppbv	99
58) Ethyl Benzene	12.70	91	64544	0.129	ppbv	91
59) m/p-Xylene	12.96	91	195598m	0.473	ppbv	
60) o-Xylene	13.68	91	69189	0.176	ppbv	100
61) Styrene	13.52	104	34539m	0.156	ppbv	
74) 1,2,4-Trimethylbenzene	16.75	105	68716	0.151	ppbv #	69
76) 1,4-Dichlorobenzene	17.13	146	41674m	0.149	ppbv	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

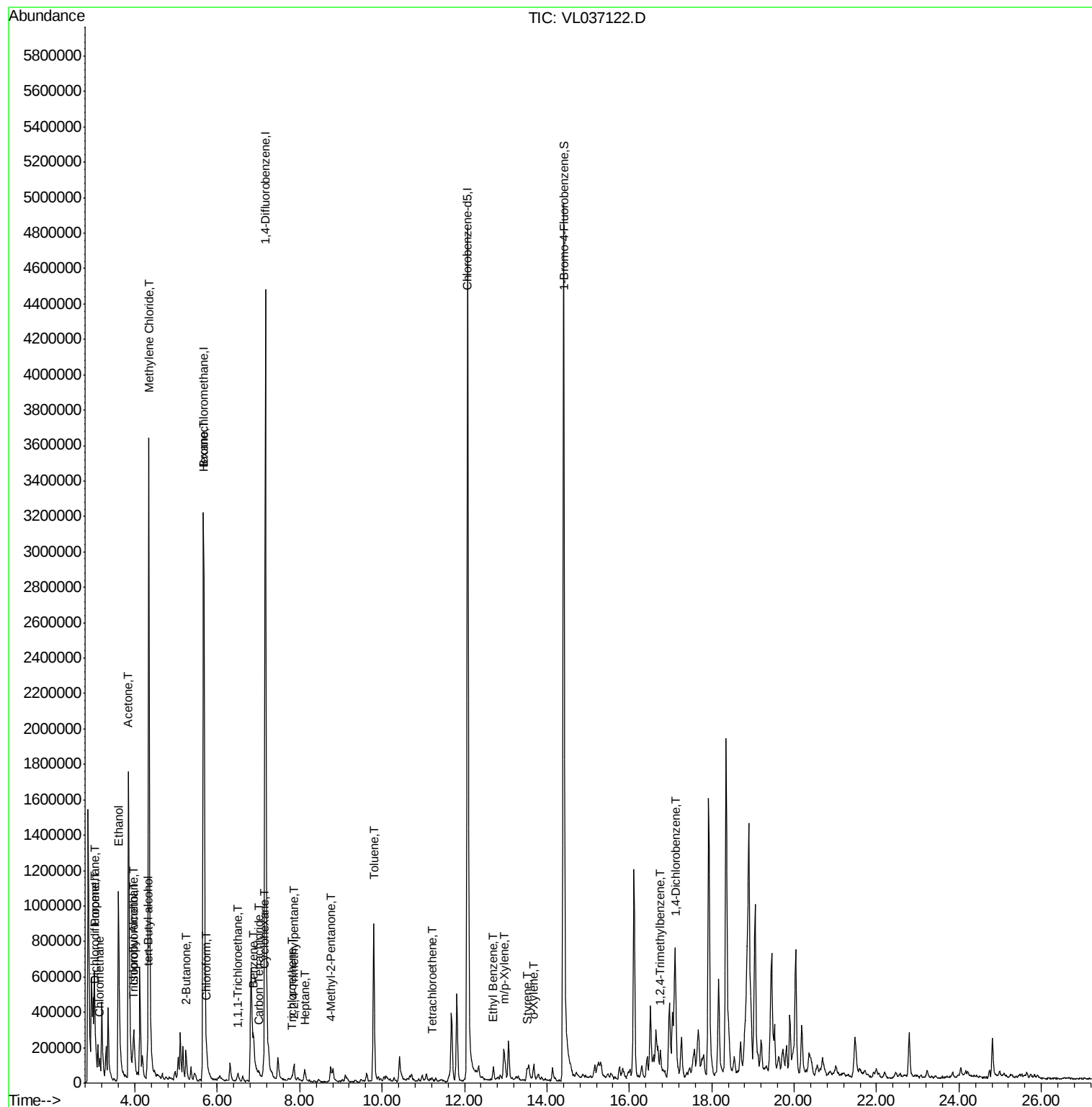
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL060221\
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Operator : SY/AP
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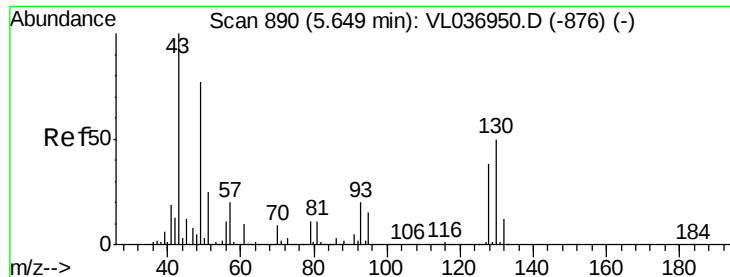
Instrument :
MSVOA_L
ClientSampleId :
SGS-19A

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Quant Time: Jun 06 20:46:37 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue May
QLast Update : Tue May 18 12:00:15 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 893

Delta R.T. 0.01 min

Lab File: VL037122.D

Acq: 3 Jun 2021 4:52

Instrument :

MSVOA_L

ClientSampleId :

SGS-19A

Tot Ion: 49 Resp: 1341957

Ion Ratio Lower Upper

49 100

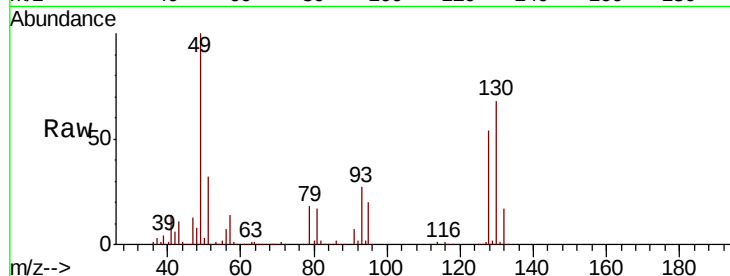
128 56.4 26.9 80.7

130 71.3 33.8 101.4

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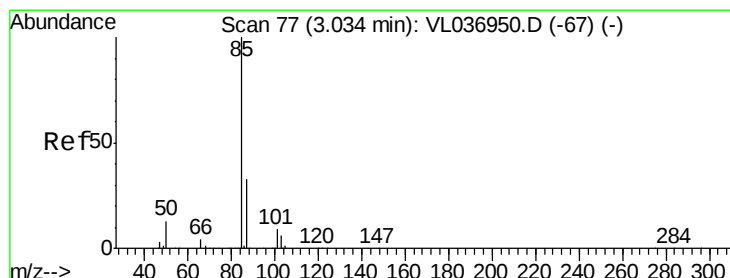
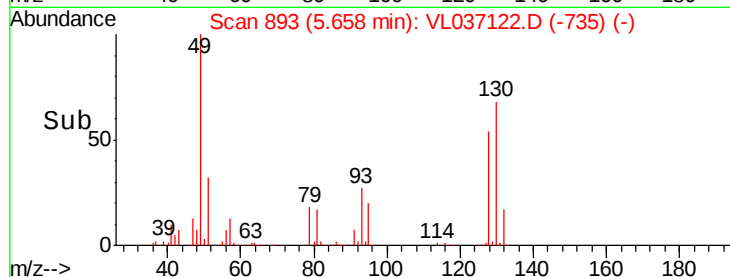
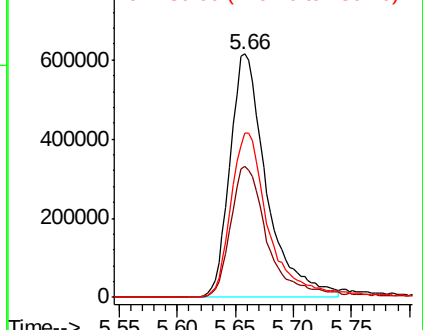
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.329 ppbv

RT: 3.04 min Scan# 79

Delta R.T. 0.01 min

Lab File: VL037122.D

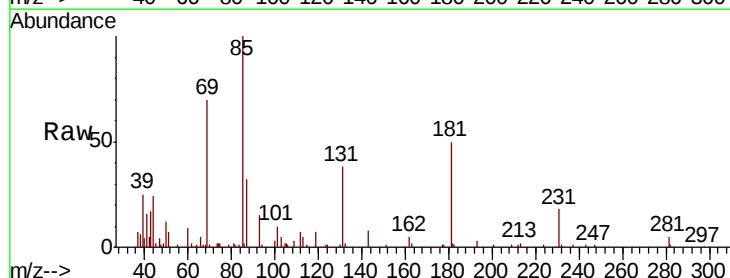
Acq: 3 Jun 2021 4:52

Tgt Ion: 85 Resp: 74992

Ion Ratio Lower Upper

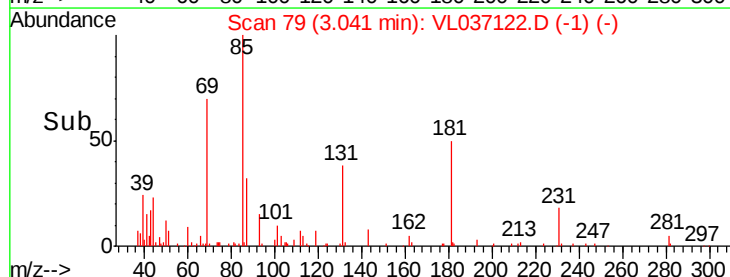
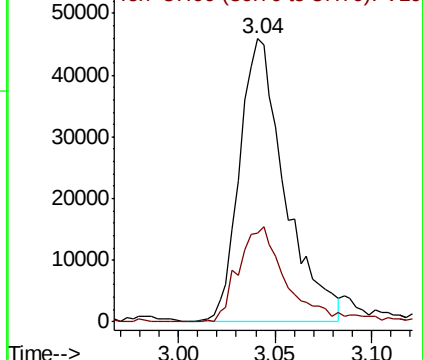
85 100

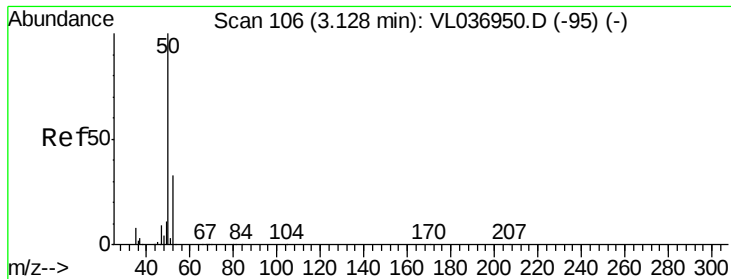
87 31.6 26.6 39.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.477 ppbv m

RT: 3.13 min Scan# 108

Delta R.T. 0.01 min

Lab File: VL037122.D

Acq: 3 Jun 2021 4:52

Instrument :

MSVOA_L

ClientSampled :

SGS-19A

Tot Ion: 50 Resp: 39917

Ion Ratio Lower Upper

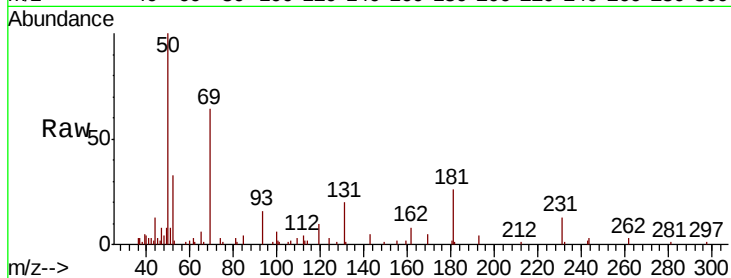
50 100

52 32.9 26.1 39.1

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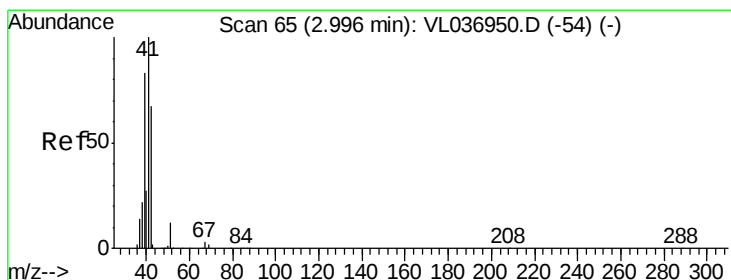
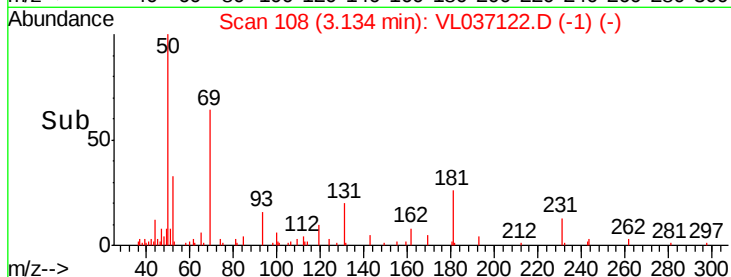
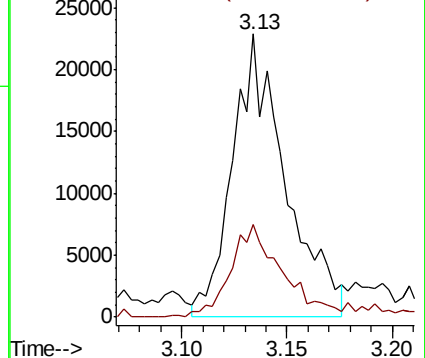
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Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#9

Propene

Concen: 1.080 ppbv

RT: 3.01 min Scan# 69

Delta R.T. 0.01 min

Lab File: VL037122.D

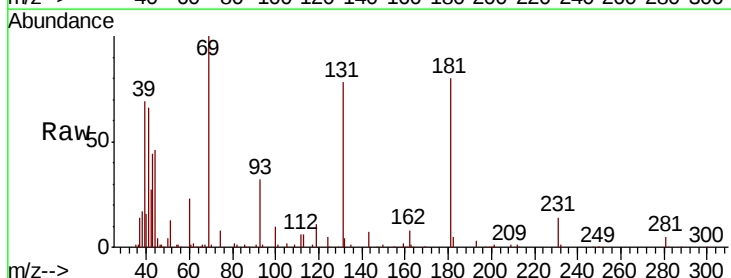
Acq: 3 Jun 2021 4:52

Tgt Ion: 41 Resp: 95097

Ion Ratio Lower Upper

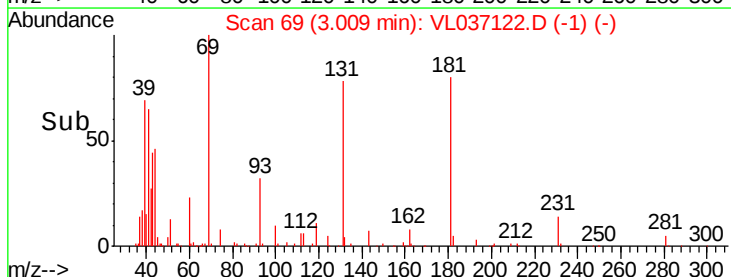
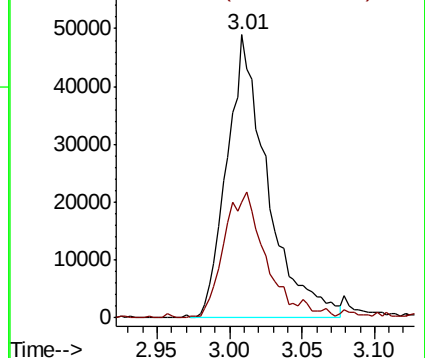
41 100

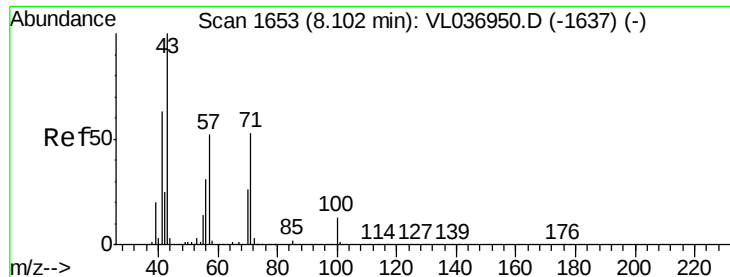
42 48.0 53.9 80.9#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#10

Heptane

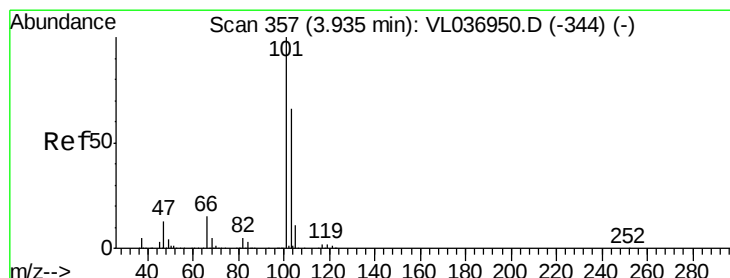
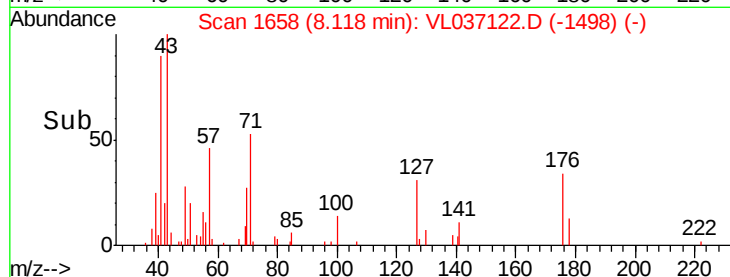
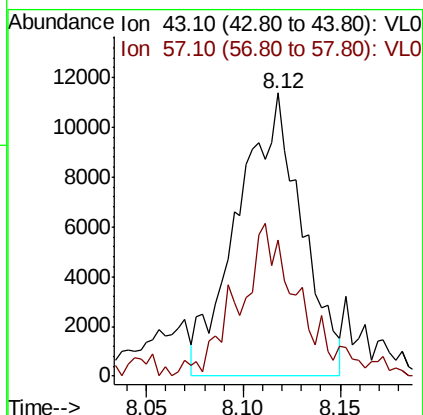
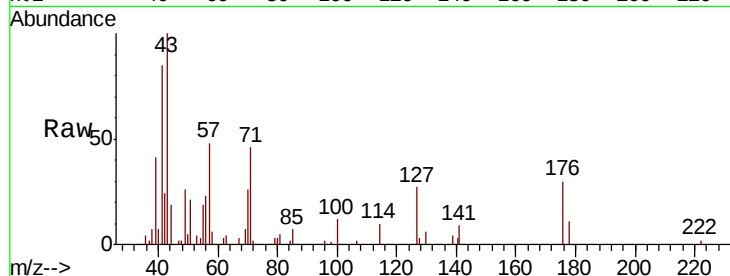
Concen: 0.119 ppbv m
RT: 8.12 min Scan# 1658
Delta R.T. 0.02 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Instrument :
MSVOA_L
ClientSampled :
SGS-19A

Tot Ion	43.10	Resp	26204
Ion Ratio	Lower	Upper	
43	100		
57	0.0	41.0	61.6#

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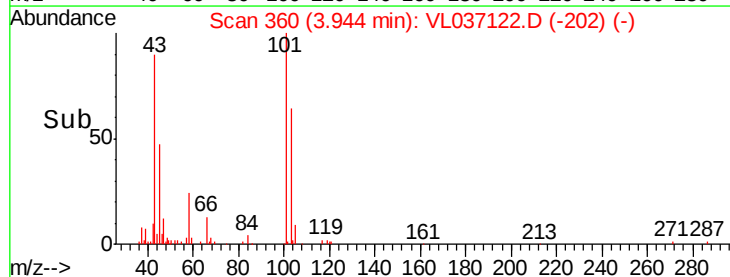
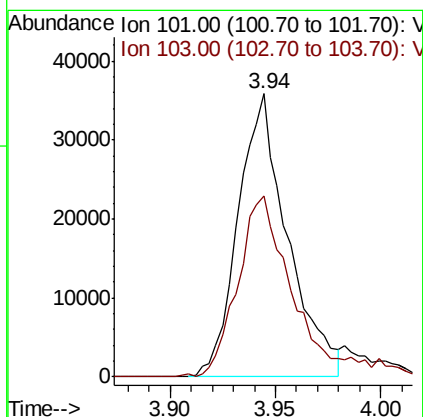
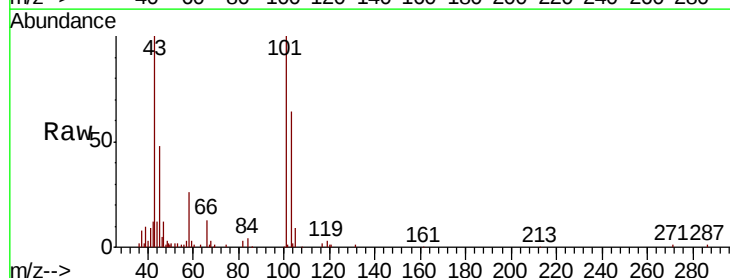


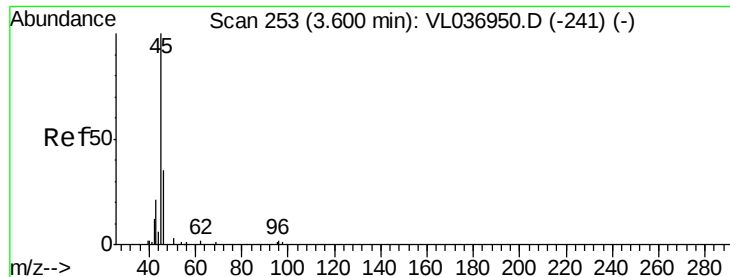
#11

Trichlorofluoromethane

Concen: 0.277 ppbv
RT: 3.94 min Scan# 360
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Tgt Ion	101.00	Resp	58407
Ion Ratio	Lower	Upper	
101	100		
103	63.2	52.6	79.0





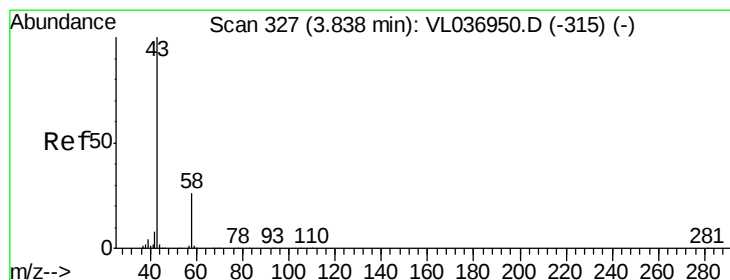
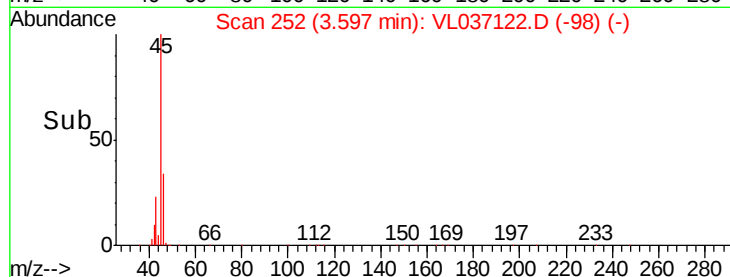
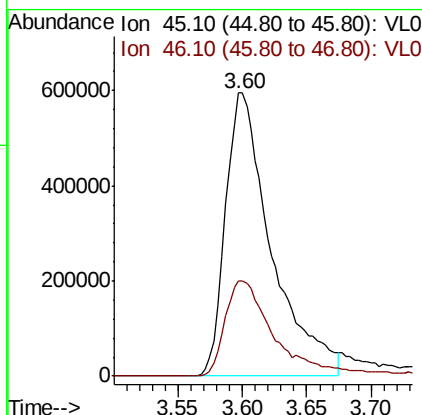
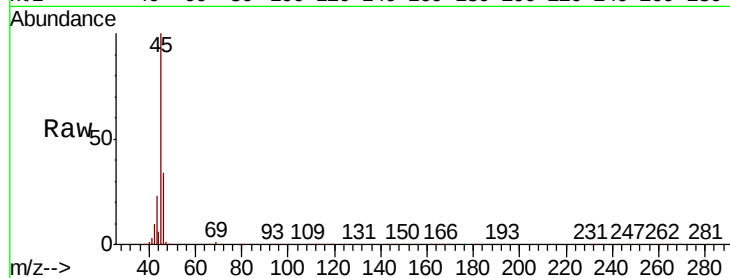
#13
Ethanol
Concen: 125.578 ppbv
RT: 3.60 min Scan# 252
Delta R.T. -0.00 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Instrument :
MSVOA_L
ClientSampleId :
SGS-19A

Tot Ion: 45 Resp: 1475034
Ion Ratio Lower Upper
45 100
46 38.0 16.3 65.3

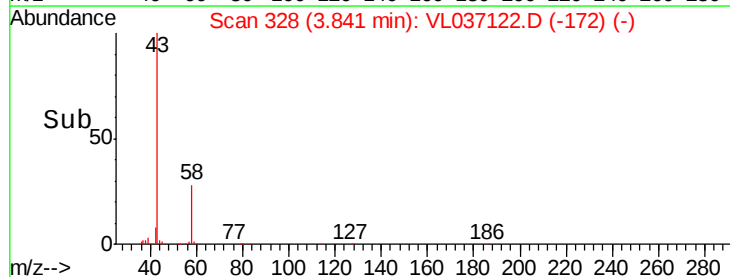
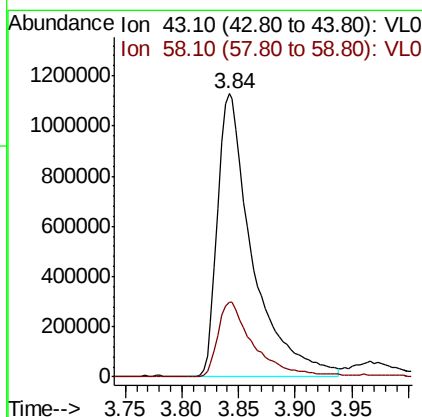
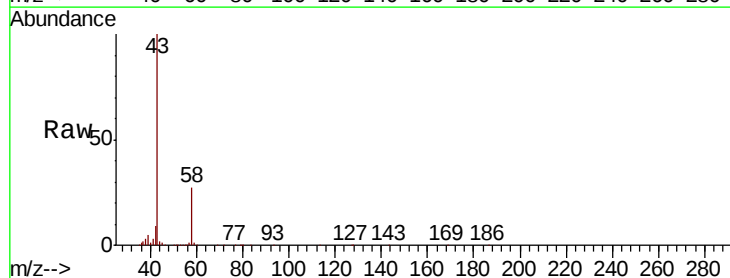
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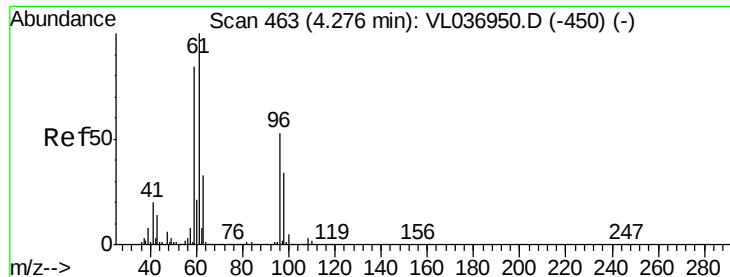
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#15
Acetone
Concen: 17.628 ppbv
RT: 3.84 min Scan# 328
Delta R.T. 0.00 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Tgt Ion: 43 Resp: 2423050
Ion Ratio Lower Upper
43 100
58 27.5 24.0 36.0





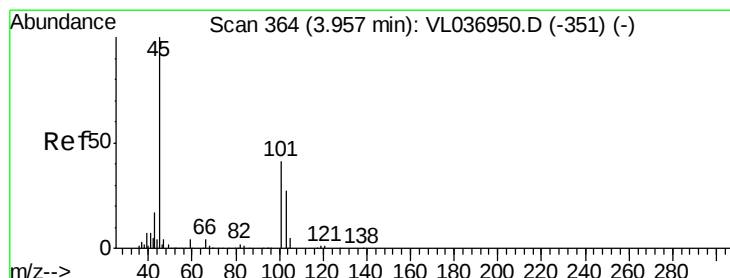
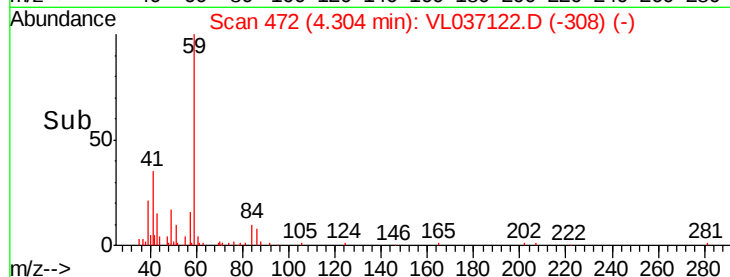
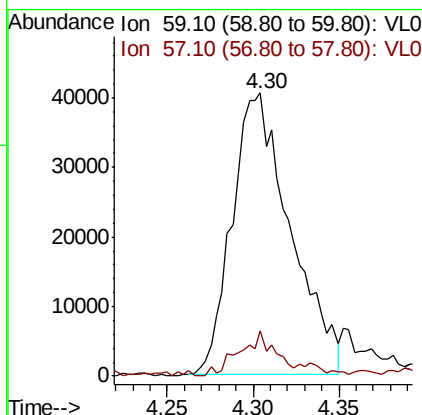
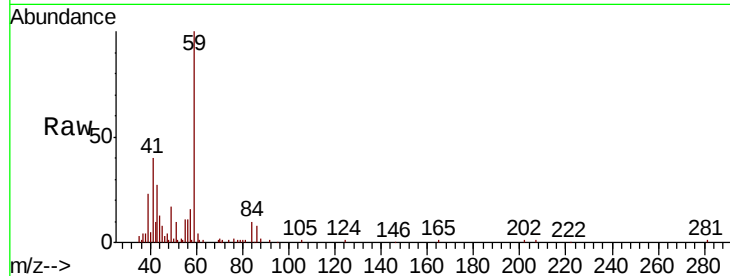
#17
tert-Butyl alcohol
Concen: 0.753 ppbv
RT: 4.30 min Scan# 472
Delta R.T. 0.03 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Instrument :
MSVOA_L
ClientSampleId :
SGS-19A

Tot Ion	Ratio	Lower	Upper
59	100		
57	9.7	8.3	12.5

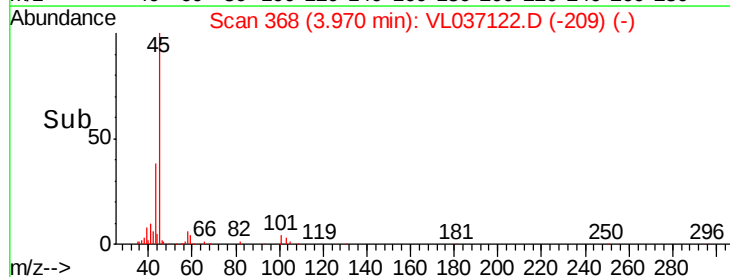
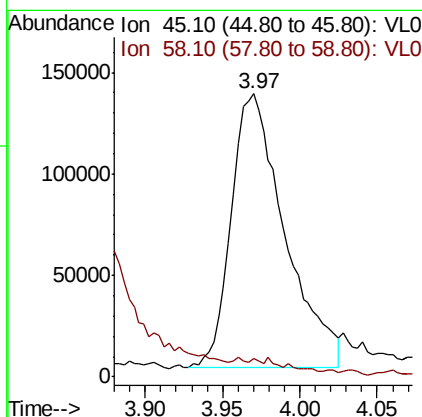
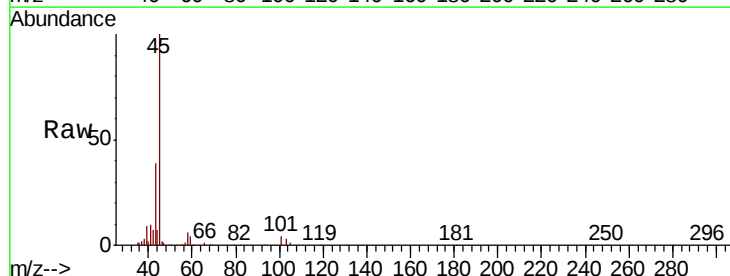
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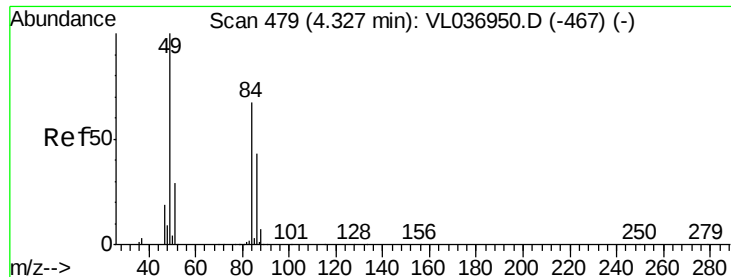
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#19
Isopropyl Alcohol
Concen: 4.395 ppbv
RT: 3.97 min Scan# 368
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Tgt Ion	Ratio	Lower	Upper
45	100		
58	213.9	37.2	55.8#





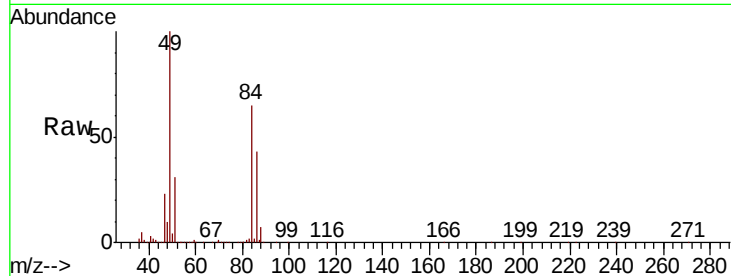
#20
Methylene Chloride
Concen: 21.776 ppbv
RT: 4.34 min Scan# 482
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Instrument :
MSVOA_L
ClientSampleId :
SGS-19A

Tot Ion	Ratio	Lower	Upper
84	100		
49	153.0	119.8	179.6
51	46.7	35.1	52.7
86	65.6	50.9	76.3

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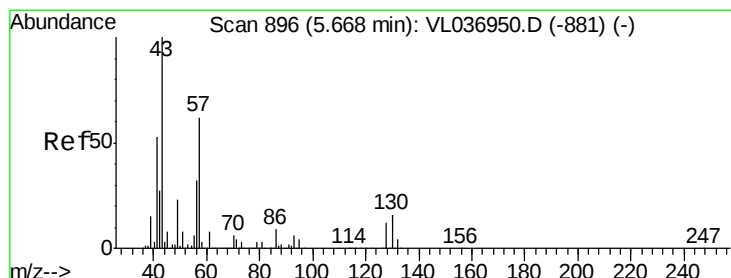
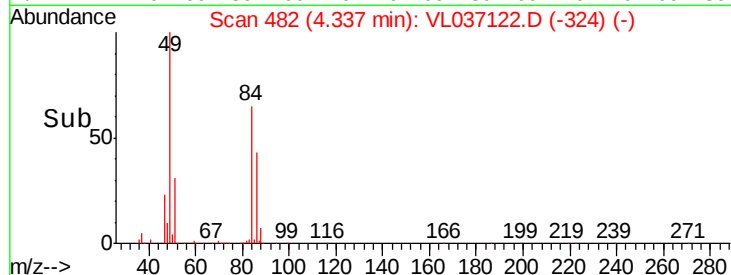
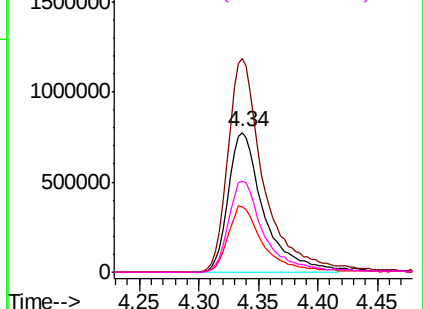
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#26
Hexane
Concen: 4.891 ppbv
RT: 5.68 min Scan# 899
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Tgt Ion	Ratio	Lower	Upper
57	100		
41	93.4	70.5	105.7
43	71.6	165.8	248.8#
56	54.7	42.2	63.4

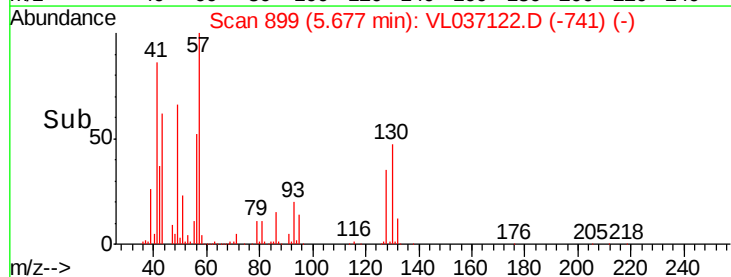
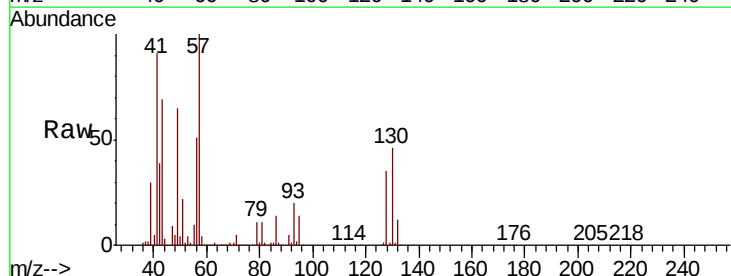
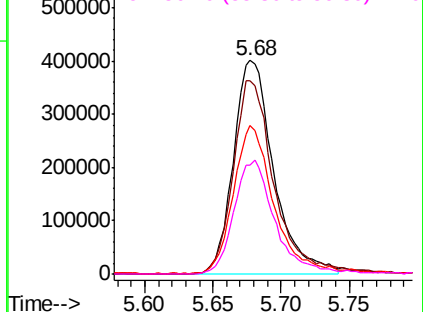
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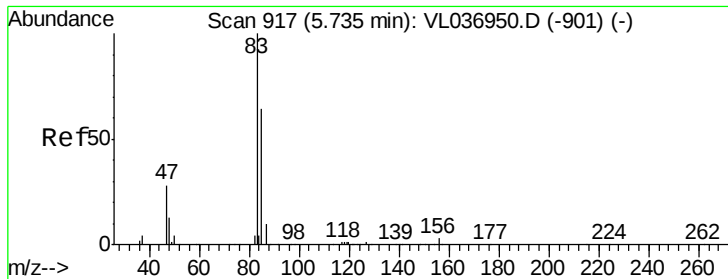
Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#29

Chloroform

Concen: 0.151 ppbv m

RT: 5.74 min Scan# 919

Delta R.T. 0.01 min

Lab File: VL037122.D

Acq: 3 Jun 2021 4:52

Instrument :

MSVOA_L

ClientSampled :

SGS-19A

Tot Ion: 83 Resp: 36001

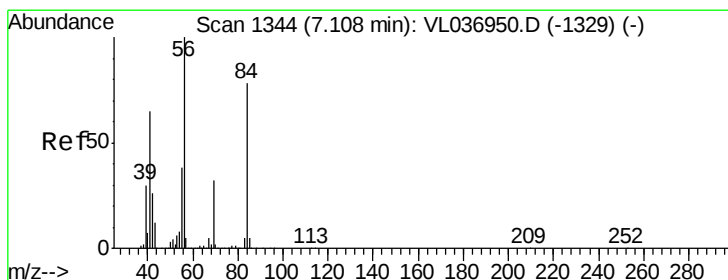
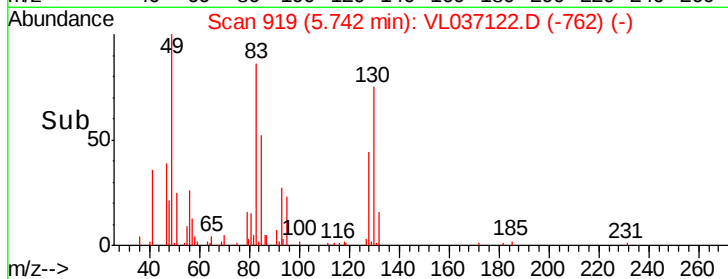
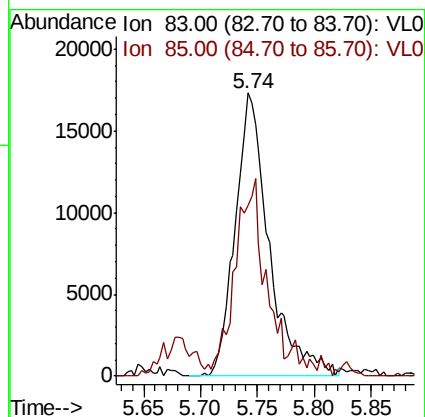
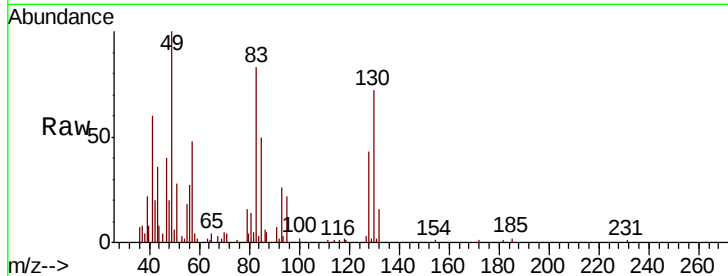
Ion Ratio Lower Upper

83 100

85 60.5 51.1 76.7

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#30

Cyclohexane

Concen: 0.147 ppbv

RT: 7.13 min Scan# 1350

Delta R.T. 0.02 min

Lab File: VL037122.D

Acq: 3 Jun 2021 4:52

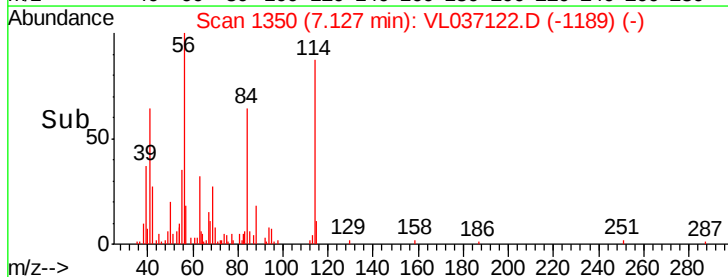
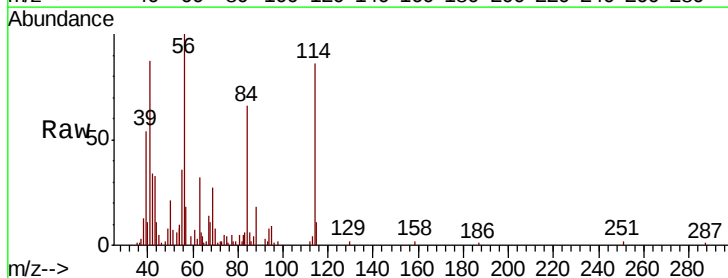
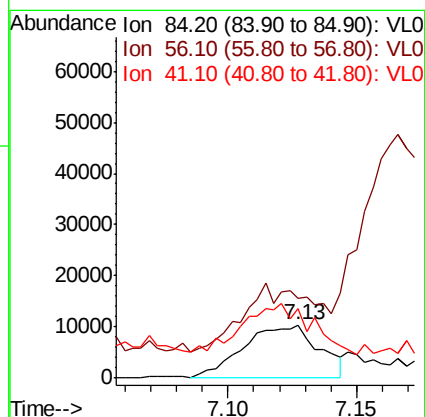
Tgt Ion: 84 Resp: 21030

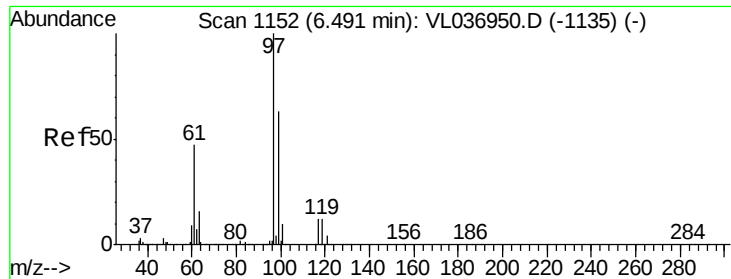
Ion Ratio Lower Upper

84 100

56 0.0 107.9 161.9#

41 96.7 65.5 98.3





#32

1,1,1-Trichloroethane

Concen: 0.107 ppbv m

RT: 6.50 min Scan# 1156

Delta R.T. 0.01 min

Lab File: VL037122.D

Acq: 3 Jun 2021 4:52

Instrument :

MSVOA_L

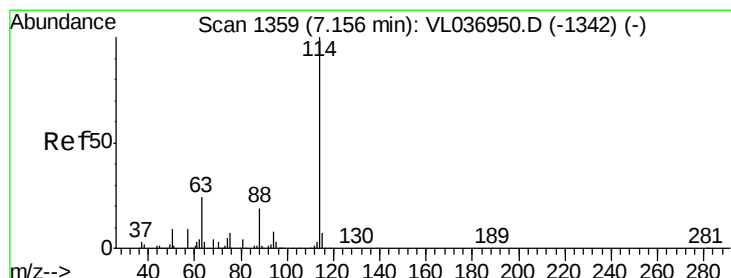
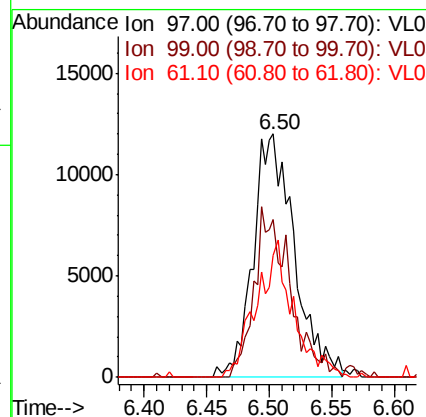
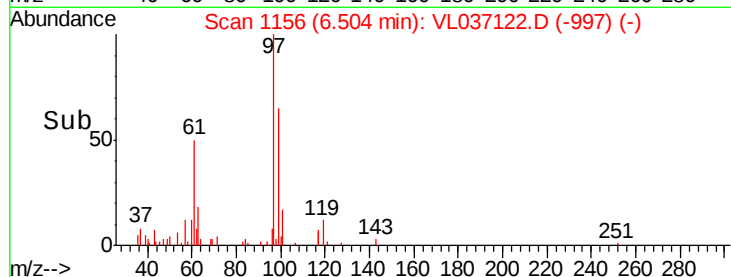
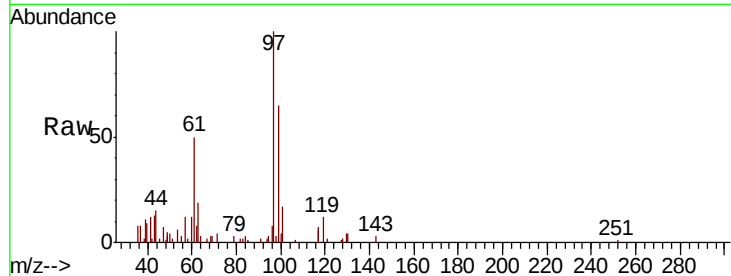
ClientSampleId :

SGS-19A

Tot Ion:	97	Resp:	27399
Ion Ratio	Lower	Upper	
97	100		
99	0.0	51.9	77.9#
61	50.3	37.6	56.4

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#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

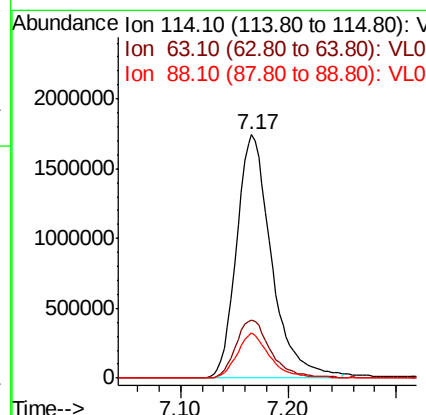
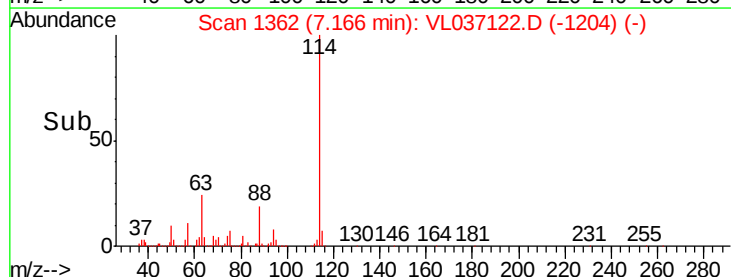
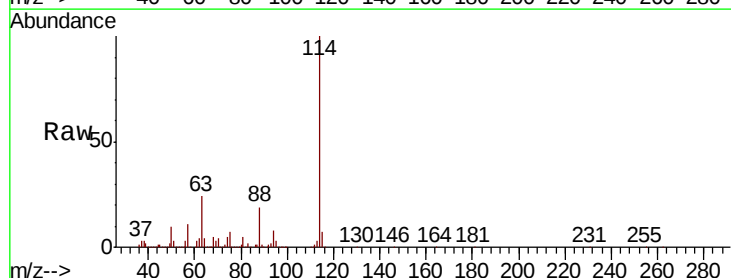
RT: 7.17 min Scan# 1362

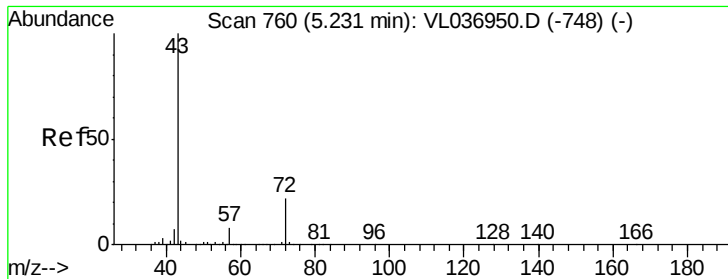
Delta R.T. 0.01 min

Lab File: VL037122.D

Acq: 3 Jun 2021 4:52

Tgt Ion:	114	Resp:	3941332
Ion Ratio	Lower	Upper	
114	100		
63	24.3	19.6	29.4
88	18.0	14.6	21.8





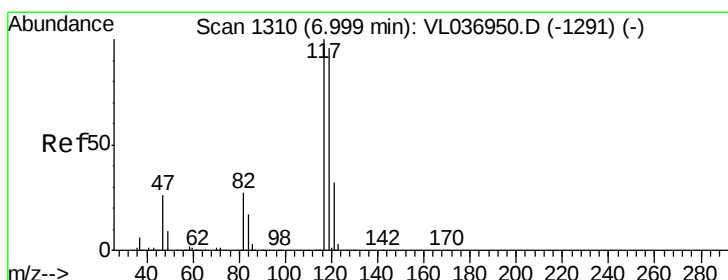
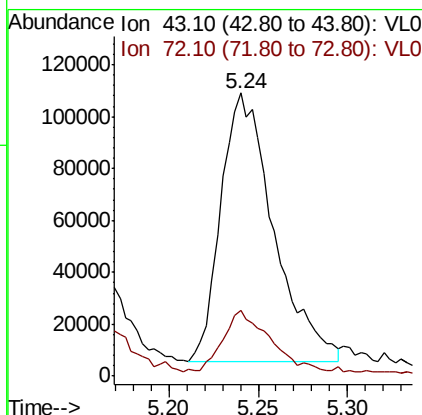
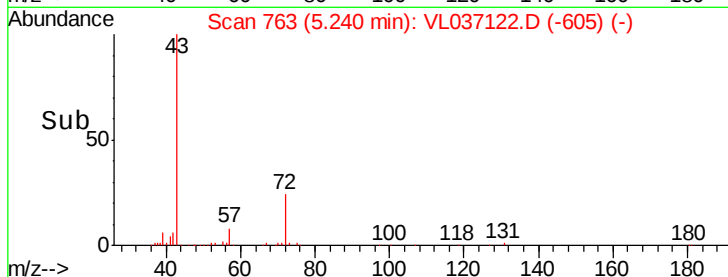
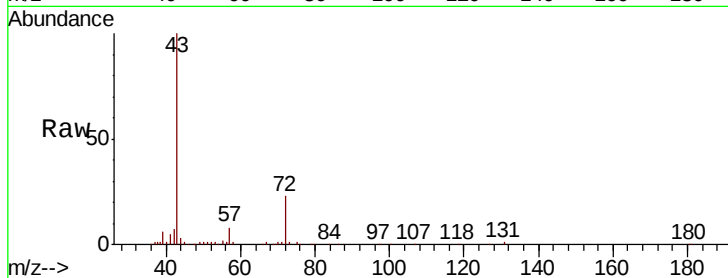
#34
2-Butanone
Concen: 1.489 ppbv
RT: 5.24 min Scan# 763
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Instrument :
MSVOA_L
ClientSampleId :
SGS-19A

Tot Ion	Ratio	Lower	Upper
43	100		
72	26.6	19.0	28.4

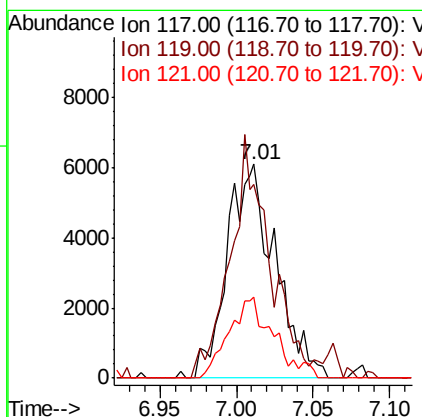
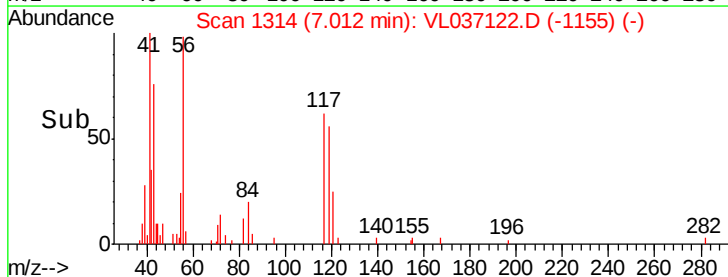
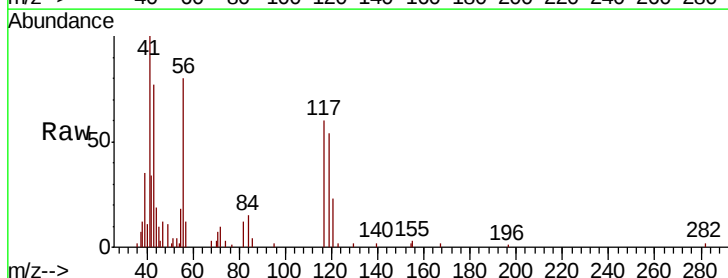
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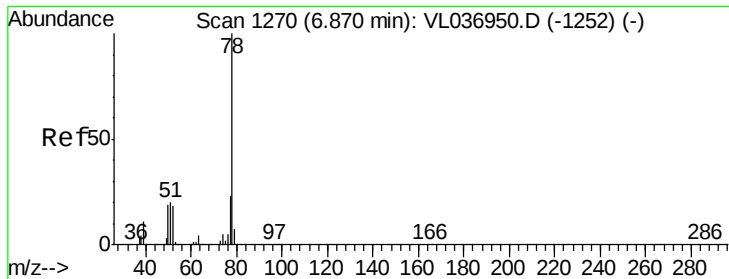
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6/7/2021 3:01:34 PM



#35
Carbon Tetrachloride
Concen: 0.051 ppbv m
RT: 7.01 min Scan# 1314
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Tgt Ion	Ratio	Lower	Upper
117	100		
119	90.4	76.6	114.8
121	37.8	25.8	38.6





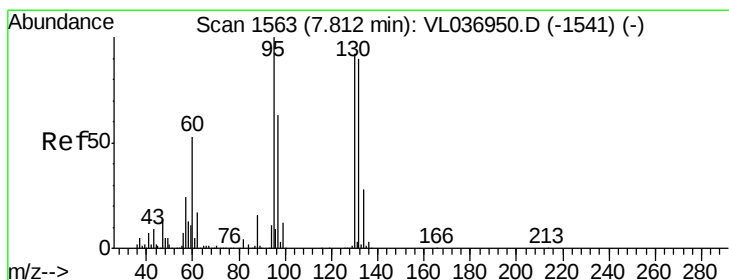
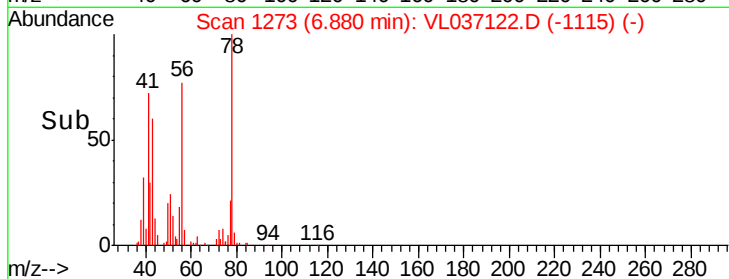
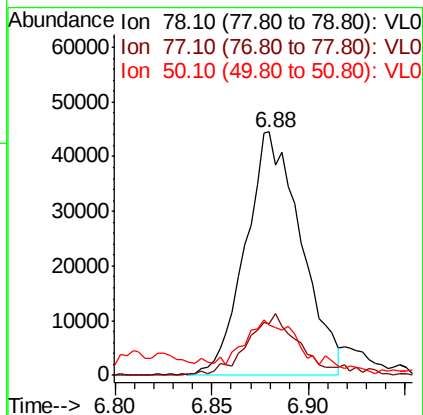
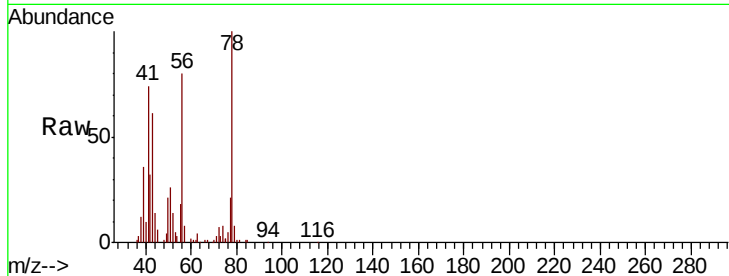
#36
Benzene
Concen: 0.261 ppbv
RT: 6.88 min Scan# 1273
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Instrument :
MSVOA_L
ClientSampleId :
SGS-19A

Tot Ion	Ratio	Lower	Upper
78	100		
77	20.4	18.6	28.0
50	16.7	15.0	22.4

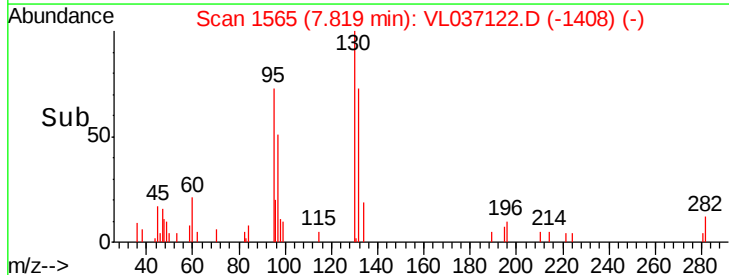
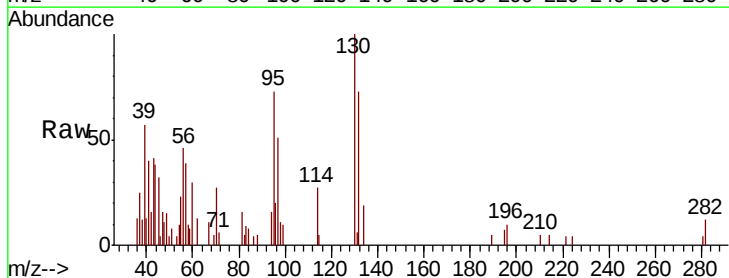
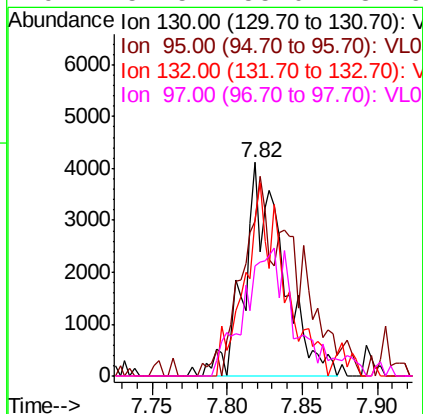
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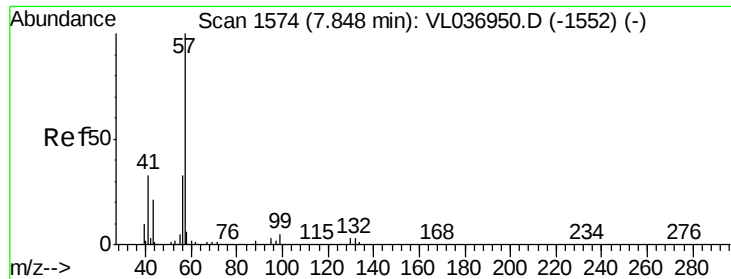
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#38
Trichloroethene
Concen: 0.050 ppbv m
RT: 7.82 min Scan# 1565
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Tgt Ion	Ratio	Lower	Upper
130	100		
95	72.7	86.9	130.3#
132	73.4	78.4	117.6#
97	51.5	55.0	82.6#





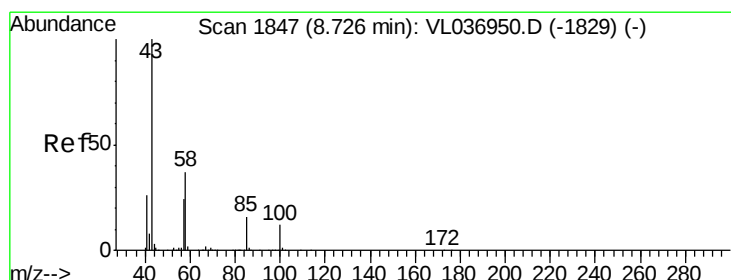
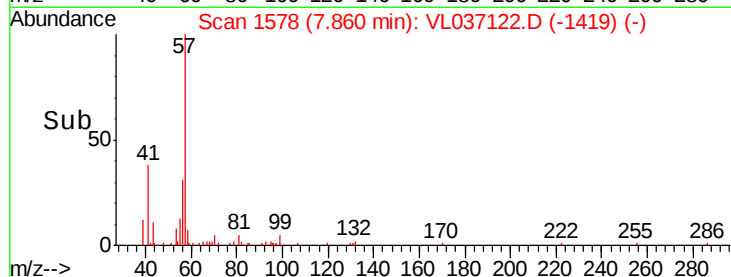
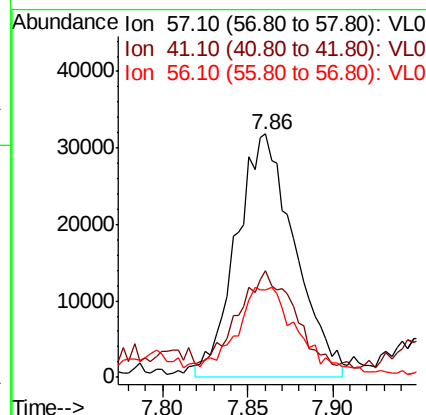
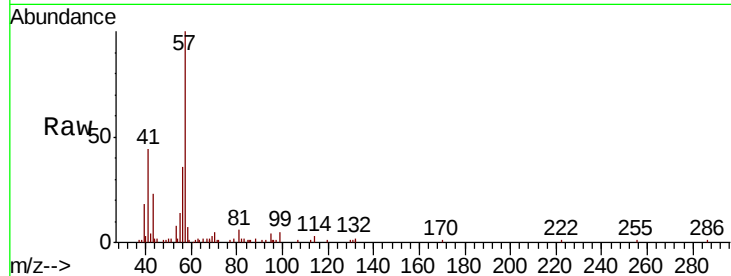
#44
 2,2,4-Trimethylpentane
 Concen: 0.130 ppbv m
 RT: 7.86 min Scan# 1578
 Delta R.T. 0.01 min
 Lab File: VL037122.D
 Acq: 3 Jun 2021 4:52

Instrument :
 MSVOA_L
 ClientSampleId :
 SGS-19A

Tot Ion	Ratio	Lower	Upper
57	100		
41	40.7	27.0	40.4#
56	39.2	25.4	38.2#

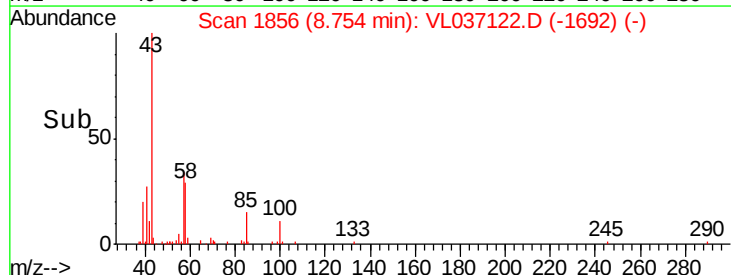
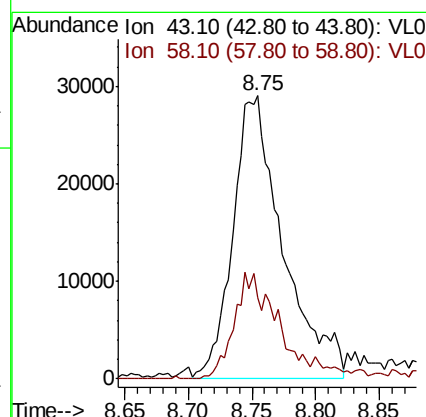
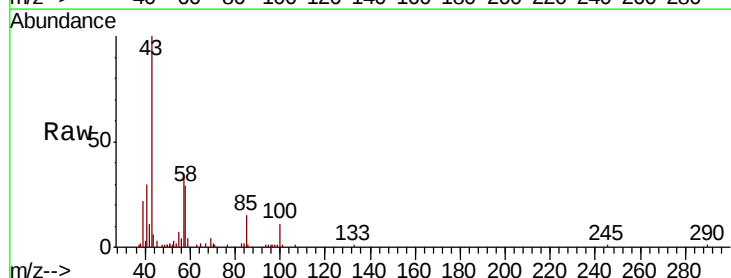
Manual Integrations
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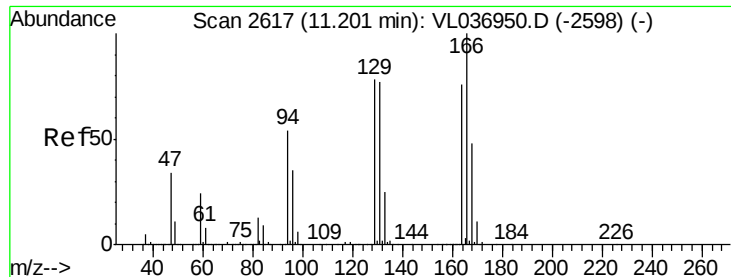
MMDadoda
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#50
 4-Methyl-2-Pentanone
 Concen: 0.336 ppbv m
 RT: 8.75 min Scan# 1856
 Delta R.T. 0.03 min
 Lab File: VL037122.D
 Acq: 3 Jun 2021 4:52

Tgt Ion	Ratio	Lower	Upper
43	100		
58	35.2	29.4	44.2





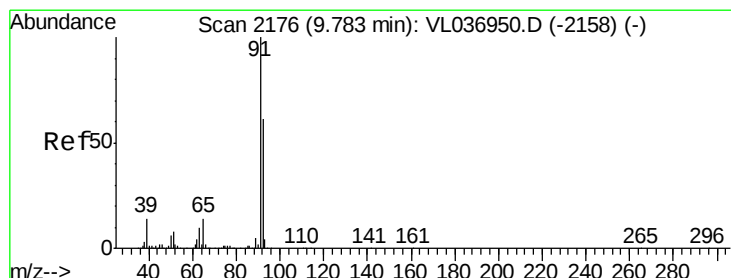
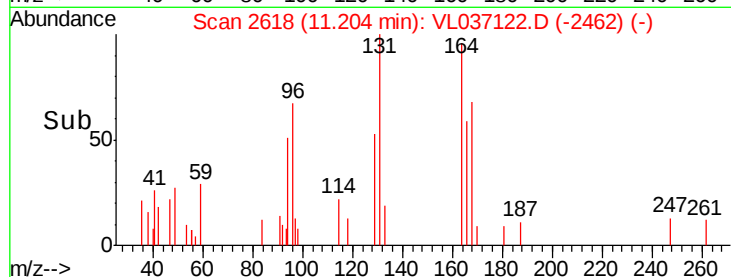
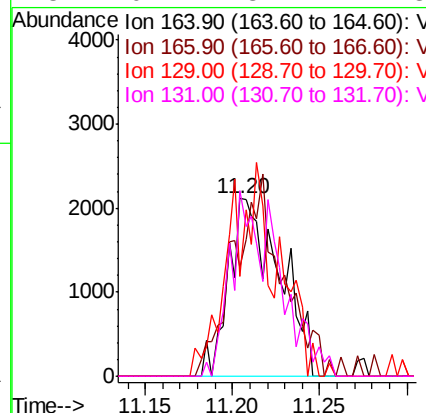
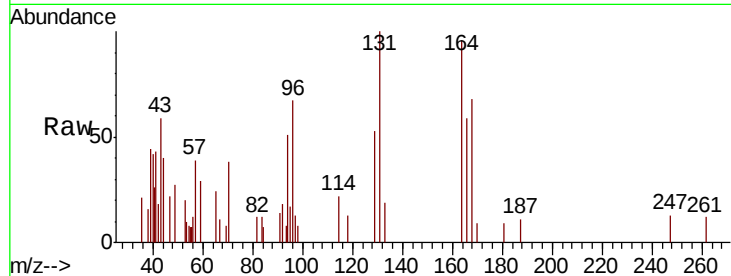
#52
Tetrachloroethene
Concen: 0.032 ppbv m
RT: 11.20 min Scan# 2618
Delta R.T. 0.00 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Instrument :
MSVOA_L
ClientSampleId :
SGS-19A

Tot Ion	Ratio	Lower	Upper
164	100		
166	61.5	105.5	158.3#
129	55.9	81.8	122.8#
131	104.7	81.2	121.8

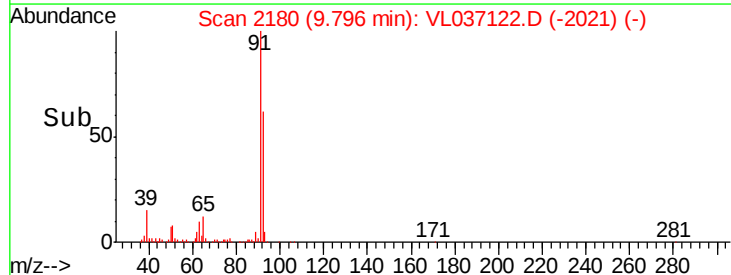
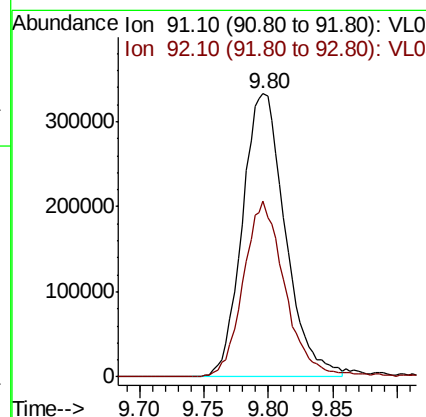
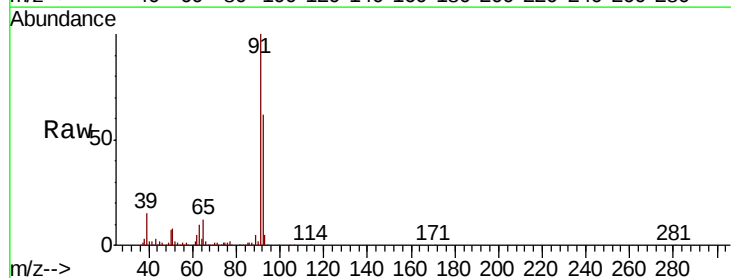
Manual Integrations
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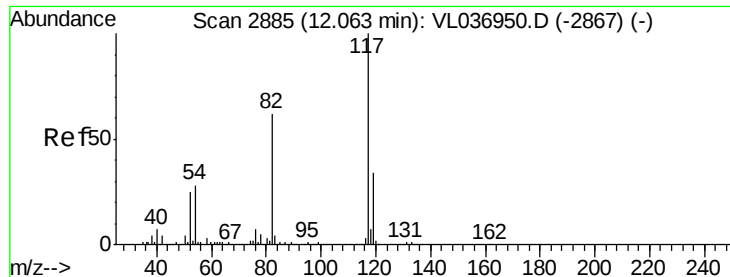
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#53
Toluene
Concen: 1.909 ppbv
RT: 9.80 min Scan# 2180
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Tgt Ion	Ratio	Lower	Upper
91	100		
92	60.9	49.5	74.3





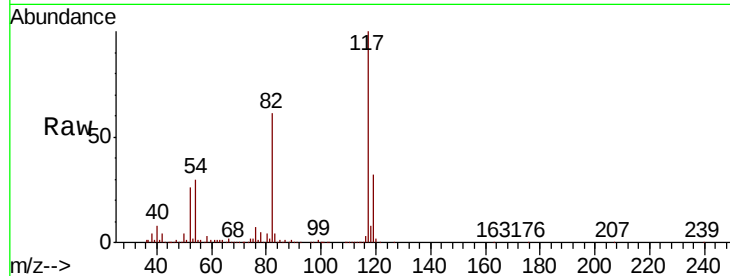
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.08 min Scan# 2889
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Instrument :
MSVOA_L
ClientSampleId :
SGS-19A

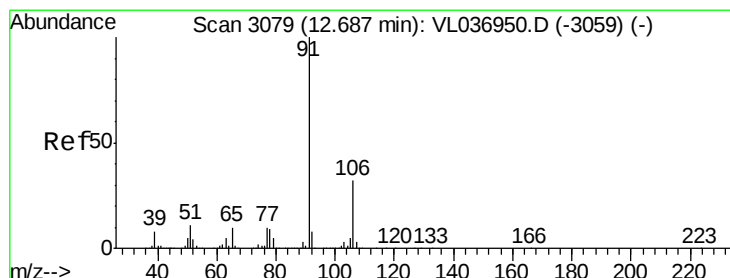
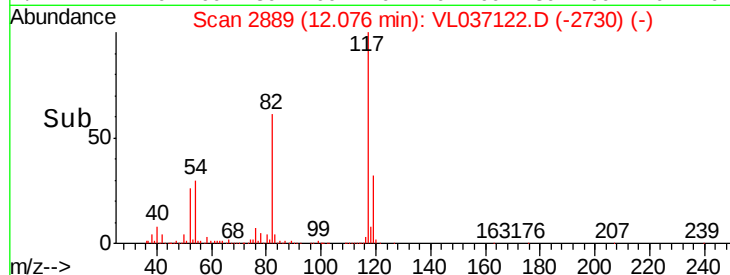
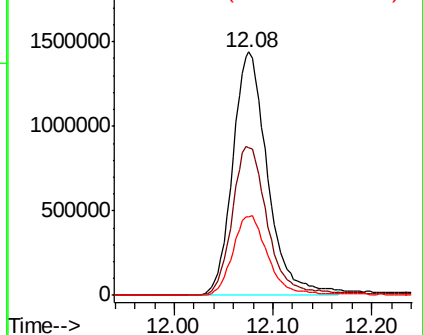
Tot Ion	Ratio	Lower	Upper
117	100		
82	64.0	52.6	79.0
119	33.9	46.6	70.0

Manual Integrations
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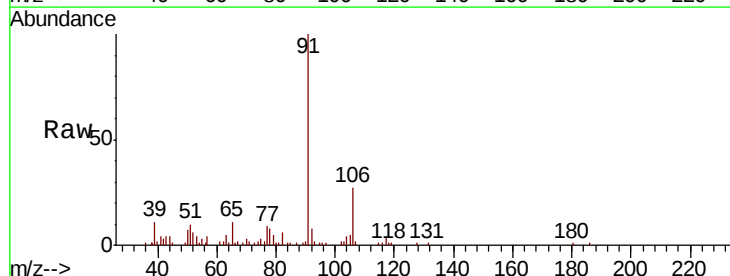


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

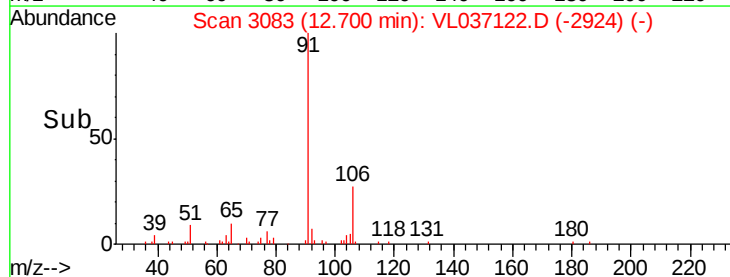
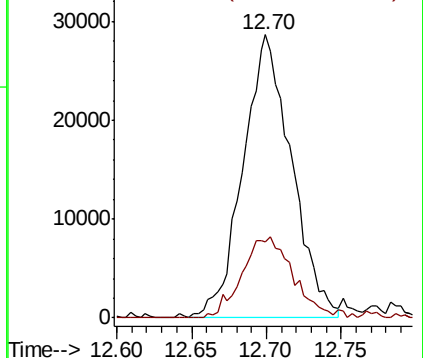


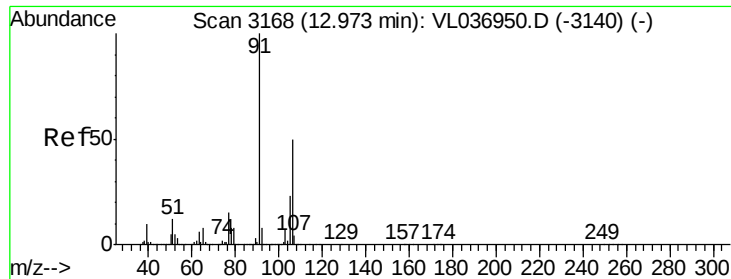
#58
Ethyl Benzene
Concen: 0.129 ppbv
RT: 12.70 min Scan# 3083
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Tgt Ion	Ratio	Lower	Upper
91	100		
106	27.0	25.6	38.4



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V





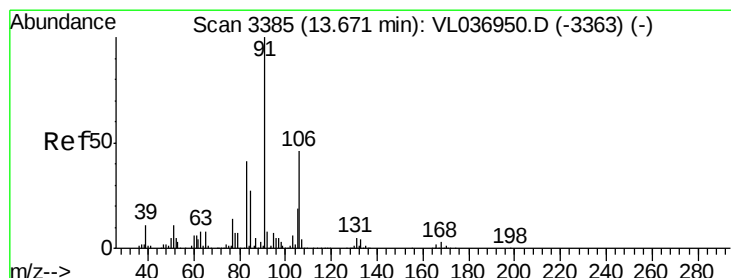
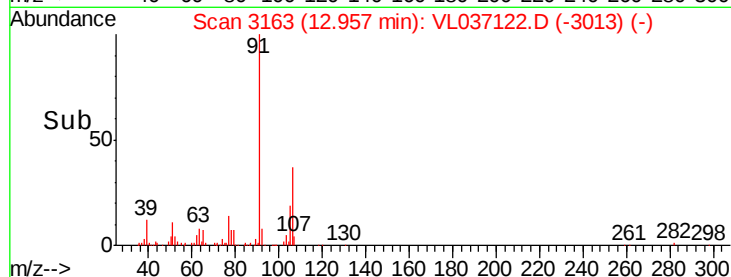
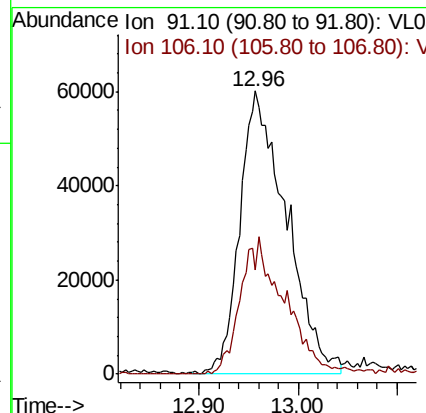
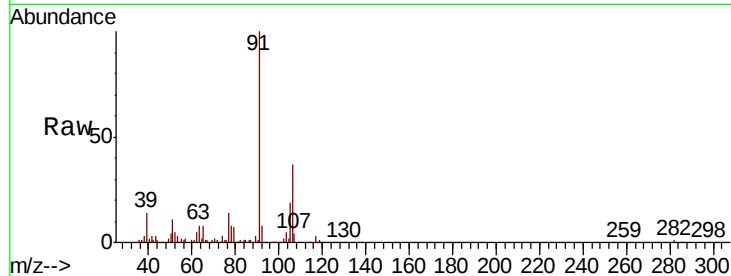
#59
m/p-Xylene
Concen: 0.473 ppbv m
RT: 12.96 min Scan# 3163
Delta R.T. -0.02 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Instrument :
MSVOA_L
ClientSampleId :
SGS-19A

Tot Ion: 91 Resp: 195598
Ion Ratio Lower Upper
91 100
106 0.0 37.4 56.2#

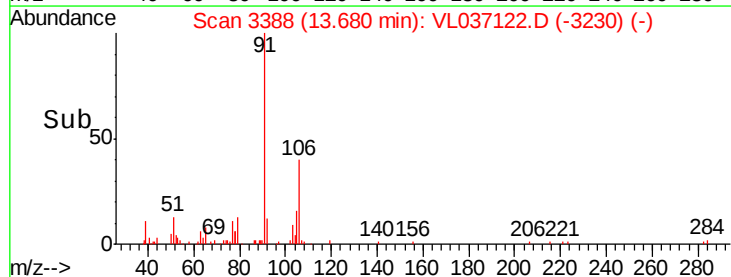
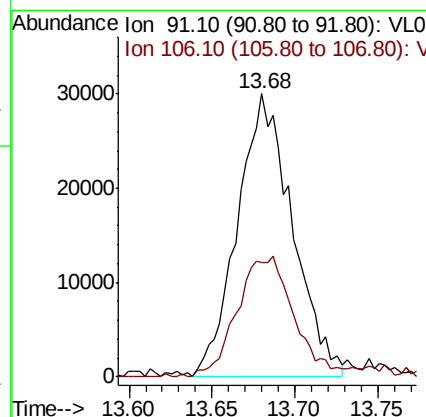
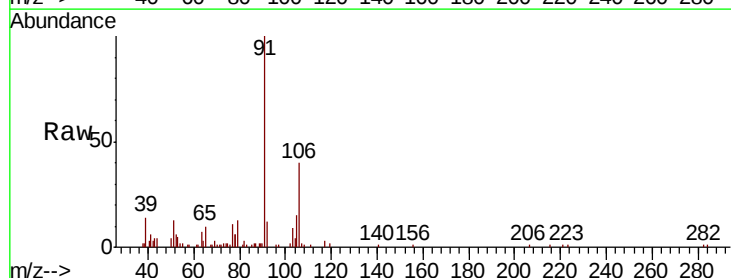
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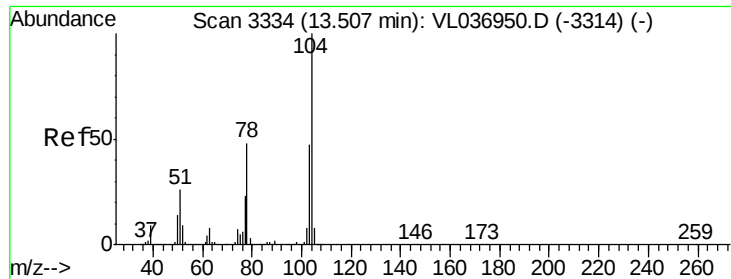
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#60
o-Xylene
Concen: 0.176 ppbv
RT: 13.68 min Scan# 3388
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Tgt Ion: 91 Resp: 69189
Ion Ratio Lower Upper
91 100
106 46.8 23.4 70.3





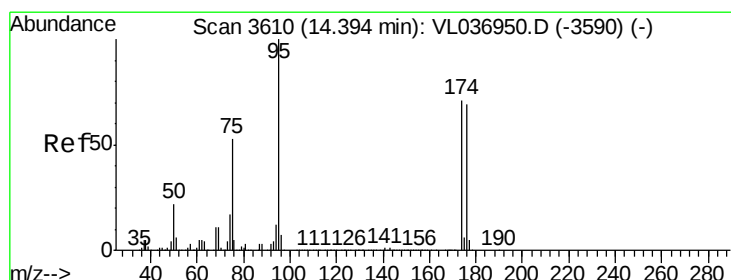
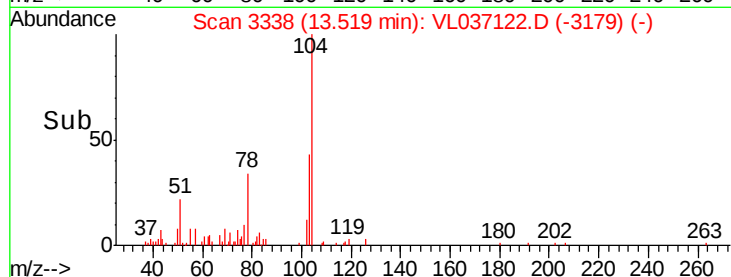
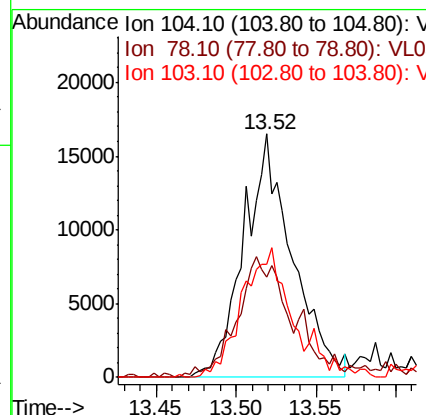
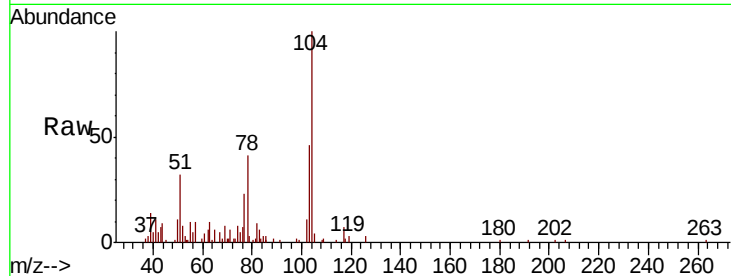
#61
Stvrene
Concen: 0.156 ppbv m
RT: 13.52 min Scan# 3338
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Instrument :
MSVOA_L
ClientSampleId :
SGS-19A

Tot Ion	Ratio	Lower	Upper
104	100		
78	59.1	39.0	58.6#
103	56.6	38.0	57.0

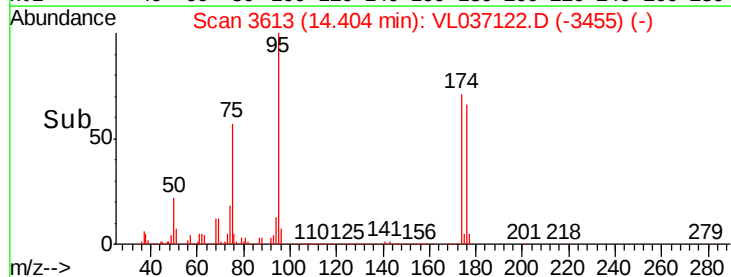
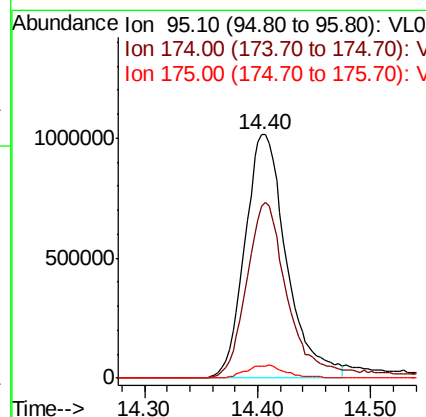
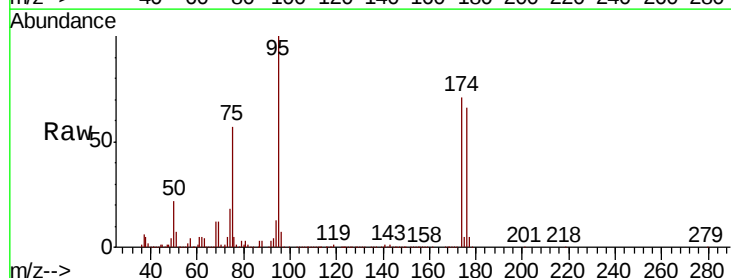
Manual Integrations
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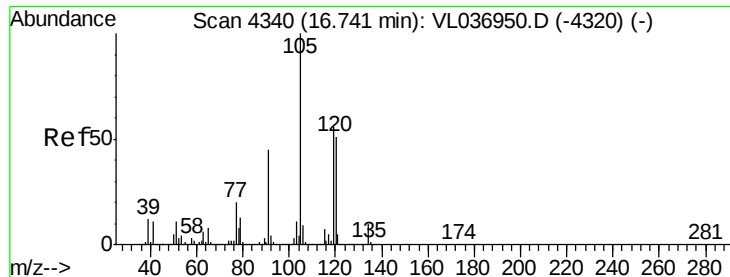
MMDadoda
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#68
1-Bromo-4-Fluorobenzene
Concen: 9.811 ppbv
RT: 14.40 min Scan# 3613
Delta R.T. 0.01 min
Lab File: VL037122.D
Acq: 3 Jun 2021 4:52

Tgt Ion	Ratio	Lower	Upper
95	100		
174	75.0	58.4	87.6
175	5.3	4.4	6.6





#74

1,2,4-Trimethylbenzene

Concen: 0.151 ppbv

RT: 16.75 min Scan# 4344

Delta R.T. 0.01 min

Lab File: VL037122.D

Acq: 3 Jun 2021 4:52

Instrument :

MSVOA_L

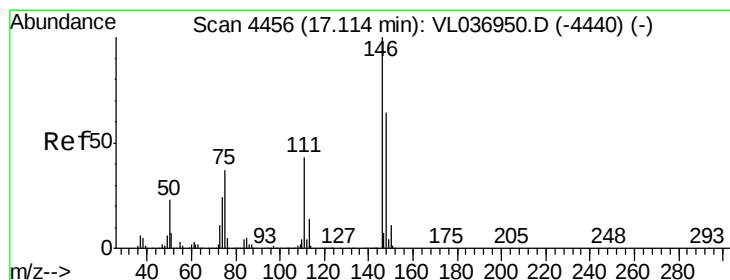
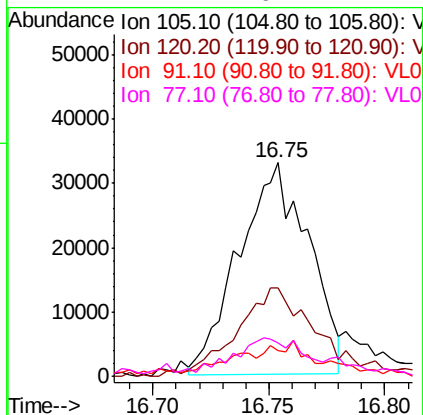
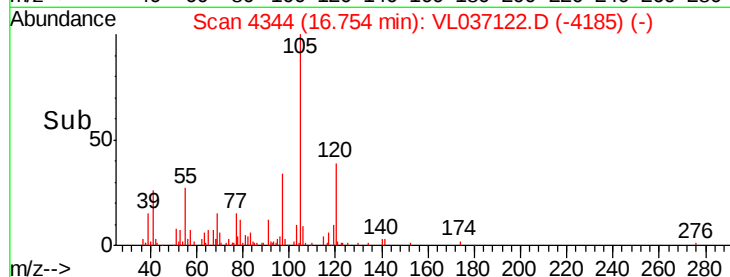
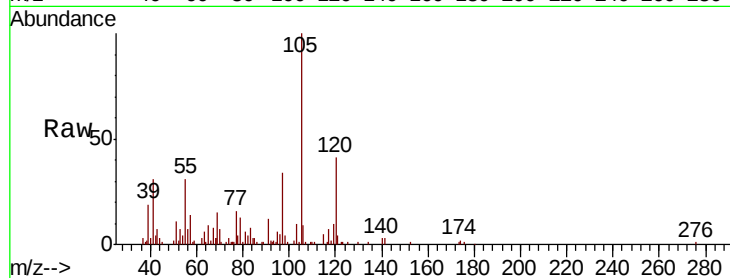
ClientSampled :

SGS-19A

Tot Ion	Ratio	Lower	Upper
105	100		
120	40.4	40.6	61.0#
91	9.8	37.4	56.0#
77	12.7	16.2	24.4#

Manual Integrations
APPROVED

MMDadoda
6/7/2021 3:01:34 PM



#76

1,4-Dichlorobenzene

Concen: 0.149 ppbv m

RT: 17.13 min Scan# 4460

Delta R.T. 0.01 min

Lab File: VL037122.D

Acq: 3 Jun 2021 4:52

Tgt Ion	Ratio	Lower	Upper
146	100		
111	57.0	22.6	67.7
148	64.7	33.5	100.5

